

ABSTRACT OF THE DISCLOSURE

A 3D image processing apparatus comprises a storing unit storing mask images corresponding to projection directions associated with a subject

5 contrast images corresponding to the projection directions, a subtracting unit generating subtraction images by subtracting the mask images from the contrast images, a reconstruction unit reconstructing first volume data from the mask images and reconstructs

10 second volume data from the subtraction images, an image processing unit generating a first 3D image representing a bone structure and/or a soft tissue structure from the first volume data, and generates a second 3D image representing a contrasted blood vessel

15 from the second volume data, an image synthesizing unit generating a synthetic image by synthesizing the first 3D image with the second 3D image, and a displaying unit displaying the synthetic image.